

## COL. GORDON'S JOURNEY TO GONDOKORO

WE have been favoured with the following remarks concerning Colonel Gordon's journey to Gondokoro.

Colonel Gordon, "His Excellency, the Governor-general of the equator!" arrived at Khartoum on March 13, and had with him a *Pall Mall Gazette* of Feb. 13; he writes on the 17th from Khartoum as follows:—

"At this season of the year the air is so dry that animal matter does not decay or smell, it simply dries up hard; for instance a dead camel becomes in a short time a drum.

"The Nile, flowing from the Albert Nyanza below Gondokoro, spreads out into two lakes; on the edge of these lakes aquatic plants, with roots extending 5 ft. into the water, flourish; the natives burn the tops when dry, and thus form soil for grass to grow on; this is again burnt, and it becomes a compact mass. The Nile rises and floats out portions, which, being checked in a curve of the channel, are joined by other masses, and eventually the river is completely bridged over for several miles, and all navigation is stopped.

"Last year the governor of Khartoum went up with three companies and two steamers, and cut away large blocks of the vegetation; at last one night the water burst the remaining part, and swept down on the vessels, dragging them down some four miles, amidst (according to the Governor's account) hippopotami, crocodiles, and large fish, some alive and confounded, others dead or dying, the fish being crushed by the floating masses. One hippo was carried against the bows of the steamer and killed, and crocodiles 35 ft. long were killed: the Governor, who was on the marsh, had to go five miles on a raft to get to the steamer.

"The effect of these efforts of the Governor of Khartoum is that a steamer can now go to Gondokoro in twenty-one days, whereas it took months formerly to perform the same journey."

Colonel Gordon left Khartoum on March 21, and in his last letter from Fashoda, 10° N., he touches on some of the scenes on the banks of the river—the storks, which he was in the habit of seeing arrive on the Danube in April, laying back their heads between their wings and clapping their backs in joy at their return to their old nests on the houses, now wild and amongst the crocodiles 2,000 miles away from Turkey; the monkeys coming down to drink at the edge of the river, with their long tails, like swords, standing stiff up over their backs; the hippos and the crocodiles. Such scenes to a lover of nature, as Col. Gordon is, doubtless would serve to make up in some measure for the loss of civilised society and comforts.

## THE EXTINCT FAUNA OF THE MASCARENE ISLANDS\*

THE members of the scientific expedition about to start for Rodriguez should make themselves acquainted with what has already been done towards the working out of its wonderful extinct fauna. We therefore beg leave to call their attention, and that of naturalists in general, to a recent contribution of M. Alphonse Milne-Edwards to our knowledge of this subject, published in the "Annales des Sciences naturelles."

In this excellent memoir M. Milne-Edwards describes the objects disinterred during some researches made in the caverns of Rodriguez under the direction of Mr. Edward Newton, the Colonial Secretary of Mauritius, as also the contents of a small collection from Mauritius itself, made in the same recent formation whence the complete skeletons of the Dodo were lately obtained.

\* "Recherches sur la Faune ancienne des îles Mascareignes." Par M. Alph. Milne-Edwards. Ann. Sc. Nat., sér. 5 Zool., t. xix.

The remains described and figured are entirely those of Birds, to the extinct forms of which class the author of this memoir has lately devoted so much of his attention. The most remarkable form thus restored to us is certainly the rail-like bird, apparently allied to the *Ocydromus* of New Zealand, which is proposed to be called *Erythromachus leguati*. This bird is of greater interest, as there can be little question that it is the *Gelinote* of which the old voyager Leguat speaks, as abundant in the island 200 years ago, and as being "grasse pendant toute l'année et d'un goût délicat," although we cannot quite understand how the pectoral muscle can have been sufficiently large to provide much sustenance to the hungry mariners of those days! Besides the *Erythromachus*, M. Milne-Edwards resuscitates species of owls, pigeons, parrots, and herons, and concludes his useful memoir with some pregnant remarks upon the general character of the ancient fauna of the Mascarene Islands.

We trust that the new expedition, soon about to start for Rodriguez, will not fail to succeed in obtaining a much more intimate acquaintance with both the ancient and modern fauna of this remote island.

## NOTES

THE annual meeting of the Linnean Society was held on Monday, in conformity with the terms of the charter, when Prof. Busk presided. The following officers were elected:—President, G. J. Allman, M.D.; Treasurer, Daniel Hanbury; Secretaries, Frederick Currey; and St. George J. Mivart. The five members of the present Council recommended to be removed were—Dr. Braithwaite; J. D. Hooker, C.B., M.D.; J. G. Jeffreys, LL.D.; Daniel Oliver; W. W. Saunders. The five Fellows recommended to be elected into the Council in the room of the above were—Major-Gen. Strachey; W. T. T. Dyer; J. E. Harting; W. P. Hiern; J. J. Weir.

THE Annual Report, dated Jan. 31, 1874, of Mr. Gould, Government Astronomer to the Argentine Republic, has come to hand, containing an account of the work done at Cordoba Observatory during the past year. Judging from this and the previous report, and from the amount of encouragement given to Mr. Gould by the Argentine Government, it seems likely that Cordoba Observatory will produce as valuable results as any other observatory in the southern hemisphere. The observations of the stars between 23° and 80° of S.D. have been diligently continued, the heavens for this purpose being divided into a number of zones of convenient size. More than 70,000 observations of stars have in this way been made, and Mr. Gould confidently hopes that by the middle of this year the zone-observations will be completed, by which time he calculates that about 65,000 different stars will have been observed. Besides this a large number of observations for instrumental corrections have been made, besides repeated and careful observations of five or six stars in each zone for the purpose of detecting any errors of observation in the other stars of the zone. A considerable amount of photographic work has also been done, though Mr. Gould has been sadly hampered in this department. A variety of other useful astronomical work has been done at the observatory, which, under Mr. Gould's superintendence and by the liberality of the Argentine Government, is being gradually brought to a condition of great efficiency.

Mr. Gould is also provisional director of the Argentine Meteorological Office, which has been established for only about two years; here also he has set to work in a thorough manner with results that promise well for the future, notwithstanding the difficulties that have met him in the getting together of good instruments. He has endeavoured to collect all the meteorological

observations on record, made at any time in any portion of the national territory or its immediate vicinity; and very excellent progress has been made in this direction. He has also enlisted coadjutors to make systematic observations in various parts of the country, and soon he hopes to have the country well dotted with such observers. A considerable amount of work has been accomplished in tabulating and computing the results thus far collected. By the end of another year it is expected that sufficient observations will be available to permit the publication of a volume devoted exclusively to the meteorological statistics of the Argentine Republic.

DR. BURMEISTER, well-known for his thorough knowledge of the natural history of the region of La Plata, where he has resided for many years, has been, we learn from the *Academy*, nominated to the post of Director of the Natural History and Physical Faculty of the University of Cordova, where seven chairs are already held by German professors.

THE delegates of the Oxford University Museum have appointed Mr. H. J. Stephens Smith, M.A., Balliol College, Fellow of Corpus Christi College, to the keepership of the University Museum, vacant by the lamented death of Prof. Phillips. The stipend of the keeper is 80*l.* per annum, with an official residence adjacent to the museum. The appointment of Mr. Smith will have to be ratified by convocation. The Professorship of Geology, vacant also by the demise of Prof. Phillips, and worth 300*l.* per annum, is still vacant, though no official announcement of the vacancy has been made.

THE first party of the English expedition for observing the transit of Venus took its departure on Saturday afternoon in the Government transport *Elizabeth Martin*, from Woolwich. The stores include cases of astronomical and photographic apparatus to the extent of nearly 150 tons measurement, besides provisions and other necessities, as some of the party will be for several weeks located in inhospitable regions. Of the gentlemen who left on Saturday, Lieut. Neate, R.N., will be chief astronomer at Rodriguez, in the Indian Ocean, and Lieut. Hoggan, R.N., one of his assistants; Lieut. Goodridge, R.N., one of the astronomers at Christmas Harbour, Kerguelen, which lies between the Cape and Australia; Mr. J. B. Smith, astronomer and photographer at the same station; and Lieut. Cyril Corbett, C.B., is to be chief astronomer at a second station in the same island. There are to follow—Mr. Burton, astronomer and photographer at Rodriguez; the Rev. F. S. Perry, F.R.S., chief astronomer at Christmas Harbour; the Rev. W. Sidgreaves, astronomer at the same station; and Lieut. Coke, R.N., who will act as astronomer with Lieut. Corbett at the second station, Kerguelen.

WE greatly regret to hear that the Rev. R. T. Lowe, the well-known author of a "Flora of Madeira," was among the passengers who lost their lives in the recent wreck of the *Liberia*.

THE French Academy has elected M. de Tchebycheff, the eminent geometer of St. Petersburg, foreign associate, in place of the late M. De la Rive, and M. Ollier of Lyon, a corresponding member in place of the late Dr. Guyon.

SCIENCE is beginning to make headway in the re-constituted University of Strasburg. A new observatory (under the direction of Prof. Winnecke) is to be commenced at once, and an 18-inch refractor has been ordered. The Physical Cabinet (under the direction of Prof. Kundt) already possesses a very fine collection of the newest apparatus, and the professor has a class of fifty men.

IN a small pamphlet, reprinted from the *Wiener Abendpost*, Karl von Littrow takes advantage of the foundation of the new observatory of the Vienna University to give a history of the old

observatory, which has been in existence for more than a century, and of some of the work which has been done in it. The new observatory has apparently been carefully planned, and will be well provided with the most approved instruments.

WE would draw attention to the valuable Notes concerning the work of the *Challenger* between Simon's Bay and Melbourne, in the *Times* of Monday and Tuesday. Very important observations have evidently been made on the currents, temperature, and life of the southern seas. Some interesting observations are made regarding icebergs, and the remarkable similarity of the fauna of the southern seas to that of the northern is noticed. "We scarcely expected," the writer says, "to find the water so deep, but it agrees with our former observations, which lead us now always to expect to find the deepest water near the land. To account for this we can only reason that no large part of the surface of the earth can be raised higher than another by means of a volcano or otherwise, unless at the same time a corresponding hollow or depression is excavated in the neighbourhood. To form a hill, the earth must be removed from somewhere else."

PROFS. DONDEES and Th. W. Engelmann have published, in Dutch, the results of their inquiries made during 1873 on the passage of blood-cells through the vessel. Working with a unicellular microscope, they have not been able to find any aperture by which the white corpuscle can pass through the vessel.

THE last number of the *Journal of Botany* contains a sketch by Mr. B. D. Jackson of the life of William Sherrard (1658-1728). Mr. Jackson's object is thus stated:—"The whole life of William Sherrard was so intimately connected with that of the leading men of Science in his day, that a comprehensive account of his career would be an epitome of his times. The exigencies of space, however, forbid more than a sketch of his life, designed to correct certain errors which appear in all the accounts that have come under my notice, copied apparently from one book into another." Mr. Jackson says of him:—"Whilst we cannot admit him as the equal of his contemporaries, Ray and Tournefort, who originated systems, yet the services he rendered to botany at a period termed by Linnaeus 'the golden age,' must make his name as lasting as the science. His intercourse with the leading men in the science both at home and abroad was intimate and frequent; he was generous even to excess in distributing seeds and dried plants, an unfailing patron of deserving naturalists, and crowned his useful life by the bequest of his library and herbarium (the most authentic and one of the largest at the time) to the University of Oxford, with the endowment of 3,000*l.* for the professor of botany."

WE are glad to learn that the anticipations expressed in one of our recent numbers as to the management of the future office for Maritime Meteorology in Germany, have been fulfilled by the appointment of Herr W. von Freeden to the post of director. Herr von Freeden was for many years at the head of the Navigation School at Elsfleth, near Bremen, and since 1867 has superintended the Seewarte at Hamburg. The best results may be hoped for from his long experience and his known zeal for Science.

IT is requested that those members of the University of Cambridge who desire to avail themselves of the facilities for study at the zoological station at Naples, for which a grant has been made from the Worts Travelling Bachelors' Fund, will send their names to Mr. Foster, Fellow of Trinity College, on or before October 1. The nominations will be made by the Board of Natural Science Studies early in October.

AN expedition is being fitted out for an exploration of the Arctic Seas. Capt. Wigans, Sunderland, has engaged Mr.

Lamond's splendid steam yacht *Diana*, and will proceed *via* Nova Zembla, sailing from Dundee on June 1. Capt. Brown, Peterhead, will command the *Diana*.

ON the 20th inst. a large representative meeting of various corporate towns was held at the Society of Arts, Adelphi, under the presidency of Lord Hampton, in reference to the national museums. The following resolutions were passed unanimously:—1. "That all museums and galleries supported or subsidised by Parliament should be made conducive to the advancement of education and technical instruction to the fullest possible extent, and that special Parliamentary funds should be granted to assist local and provincial museums in the acquisition and loan of objects, and with building grants, and thus extend their usefulness." 2. "That in the opinion of this meeting all national museums and galleries should be placed under the authority of a Minister of the Crown, with direct responsibility to Parliament, thereby rendering unnecessary for the purposes of executive administration unpaid and irresponsible trustees except those who are trustees under bequests or deeds, who might continue to have the full powers of their trust, but should not be charged with the expenditure of money voted by Parliament." The chairman was requested to submit to the Prime Minister the foregoing resolutions, and press their importance on his attention.

WE cannot regret that Lord Hampton's motion for the appointment of a Minister of Education in the House of Lords last Friday was lost. Lord Hampton does not seem to understand what is really required, and the Duke of Richmond's reply under the circumstances was perfectly appropriate and conclusive.

IT is known that several years ago the German Astronomical Society undertook the systematic revision of star catalogues for the boreal hemisphere up to the 9th magnitude. That heavy task has been undertaken by fourteen observatories—Cambridge (England), Christiania (Norway), Palermo (Italy), Neuchâtel (Switzerland), Leyden (Netherlands), Harvard College and Chicago (U.S.), Pulkowa, Dorpat, Helsingfors, Kazan (Russia), Berlin, Leipsig, Bonn (Germany). The boreal hemisphere has been divided into zones, each of which has been allotted to two different observatories. Pulkowa was entrusted with the care of observing fundamental stars numbering 539. The work is just half done, and will be finished by the end of 1875, when every star marked by Lalande in his "Histoire celeste," and Argelander in his star catalogue, will have been revised.

A CHOLERA conference is to meet in Vienna in the course of the autumn, to discuss the best methods of preventing the propagation of the disease. Prof. Pettenkofer, who has carefully watched the progress of cholera in Munich since its outbreak nearly a year ago, will be present, and will no doubt have valuable information to contribute. The number of deaths, which last winter amounted to 55 a-day in Munich (as a maximum), had sunk last month to 2 per diem.

THE German Society of Anthropology is industriously collecting material for the Prehistoric map, which it was resolved, at the meeting of April 1870, to prepare for publication. Among other points to be indicated on this map will be the position of the most notable Prehistoric settlements, fortifications, lake-dwellings, cave-dwellings, burial-mounds, and other places of sepulture. By a judicious use of colours, the various periods—Stone, Bronze, and Iron—will be indicated, and altogether the map will be one of great value to the student of archaeology and ethnology.

WE have already referred to the treatment by the French Government of M. Alglave, Professor in the Law Faculty of Douai, and editor of *La Revue scientifique*. M. Alglave had been dele-

gated temporarily to the faculty of Grenoble, but as he had undertaken to deliver a course of lectures at Lille, and had moreover been designated secretary to the approaching session of the French Association at that town, he petitioned the minister to permit him to remain at Douai; the reply was absolute dismissal from his post without delay. Such is a specimen of how French ministers use their "little brief authority."

LAST Thursday a handsome new aquarium, well stocked with marine and fresh-water fish, was opened at Manchester. The sea-water is brought by train in barrels from Blackpool, a distance of about 40 miles, and a constant supply is maintained.

MR. J. W. DOUGLAS, the well-known entomologist, has become one of the editors of the *Entomologist's Monthly Magazine*.

THE first part of the third issue of Sowerby's "British Wild Flowers" (Van Voorst) is now out; the descriptions with an Introduction and a Key to the Natural Orders, being by C. Pierpoint Johnson, Botanical Lecturer at Guy's Hospital.

THE additions to the Zoological Society's Gardens during the last week include a Wild Boar (*Sus scrofa*) from Algeria, presented by Mr. W. F. Tempest; an Ourang-outang (*Simia satyrus*) from Borneo, deposited; a Raccoon-like Dog (*Nyctereutes viverrinus*) from Amoorland, new to the collection; a Great Bustard (*Otis tarda*), European; five Red-legged Falcons (*Erythropus vespertinus*), European, purchased; three Temminck's Tragopans (*Cerionis temminckii*) and three Peacock Pheasants (*Polyplecton chinensis*), hatched in the Gardens; and two Hairy Armadillos (*Dasyurus villosus*), born in the Gardens.

#### THE FLORENCE INTERNATIONAL BOTANICAL CONGRESS

THE International Botanical Congress commenced its sittings at Florence on May 15, under the presidency of Dr. Hooker, Prof. Parlatore being disabled by illness from filling that post. The vice-presidents elected were Mr. Benthams and Dr. Moore for Great Britain, M. de Candolle for Switzerland, M. Fenzl for Austria, MM. Planchon, Weddell, and Bailion for France, MM. Reichenbach, Hofmeister, Wendland, and Karl Koch for Germany, and MM. Regel, Bunge, Gelnorff, and Wolkestein for Russia. At the Congress England was represented by Professors Benthams, Alliman, and Masters, Drs. Hooker and Ball, Messrs. Smee, Hiern, and Maw; David Moore represented Ireland, and Charles Moore Australia.

On the first day a paper was read by Dr. Planchon on *Phylloxera vastatrix* and the vine disease; on vegetable palæontology by M. Carnel; on the development of *Cynomorium cocineum*, by Dr. Planchon; M. Famintzin on the spores of *Aethalium*.

At the second meeting, May 18, Prof. de Candolle, presided, and among the papers read was one by Mr. W. P. Hiern, of Cambridge, on the determinations of the fossils that have been referred to *Diospyros* or allied genera. At the third meeting, May 20, Dr. Bunge, a Russian botanist, presided, and the papers included one by De Candolle on Alpine plants. On the 16th took place the inauguration of the bust of Philip Barker Webb, an English botanist, who left his valuable herbarium to Florence. An oration was made by Dr. Bolt, of Berlin.

The International Horticultural Exhibition, which took place concurrently with the Congress, was opened by the King on the 15th, and the following day 1,800 people were present.

The show was held in a new iron building in the middle of the town, which is to be used as a market. The *Italian News*, published in Rome May 19, says: "The Floral Exhibition has proved a decided success, in spite of the bad weather which accompanied its inauguration. There has been a large daily attendance. The show was remarkably complete, and the prizes have been awarded with such justice that no jealousies have been allowed to mar the pleasure of the recipients."

It is proposed that the conference for next year shall be held in London.